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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PANKAJ SHRIVASTAVA, GREGORY GOODHUE,
ATA KHAN, ZHIMIN DING, and CRAIG MACKENNA

Appeal 2009-004658
Application 10/566,515
Technology Center 2100

Decided: March 24, 2010

Before LANCE LEONARD BARRY, JEAN R. HOMERE, and JAMES R.
HUGHES, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) (2002) from a final rejection of claims 1-21. We have jurisdiction under 35 U.S.C. § 6(b) (2008).

We affirm.

Introduction

According to Appellants, the invention relates to a register architecture that facilitates “processing of interrupting program streams without storing and restoring interrupted program stream critical data” (Spec., Abst.).

Exemplary Claim

Claim 1 is an exemplary claim and is reproduced below:

1. A system comprising:

a processor that executes logical or arithmetic operations;

a plurality of register bank blocks used as special function registers by the processor during the execution of the logical or arithmetic operations and,

a register bank block decoder circuit for activating one and only one of the plurality of register bank blocks, the register bank block decoder circuit responsive to interrupt event operations for selecting the one of the plurality of register bank blocks for being activated, where different interrupt event operations result in selection of different ones of the plurality of register bank blocks.

Prior Art

Mitsuhira	5,155,853	Oct. 13, 1992
Yoshida	5,450,566	Sep. 12, 1995
Fujimura	5,751,988	May 12, 1998
Hohl	6,035,422	Mar. 7, 2000

Rejection¹

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Mitsuhiro and Official Notice.

GROUPING OF CLAIMS

(1) Appellants argue claims 1-7, 11, 13-16, and 19-21 as a group on the basis of claim 1 (App. Br. 6). We select independent claim 1 as the representative claim. We therefore treat claims 2-7, 11, 13-16, and 19-21 as standing or falling with representative claim 1.

(2) Appellants argue claims 8-10, 17, and 18 as a group on the basis of claim 8 (*id.* at 9). We select independent claim 8 as the representative claim. We therefore treat claims 9, 10, 17 and 18 as standing or falling with representative claim 8.

(3) Appellants argue claim 12 separately (*id.* at 10). We therefore treat claim 12 as standing or falling separately.

We accept Appellants' grouping of the claims. *See* 37 C.F.R. § 41.37(c)(1)(vii).

35 U.S.C. § 103(a): claims 1-7, 11, 13-16, and 19-21

Appellants argue the cited references do not disclose the use of special function registers (App. Br. 5). Appellants contend "special function registers, as known to those of ordinary skill in the art and as consistent with Appellant's Specification, are accessed by a processor as if they were

¹ We note that the Examiner relied upon Mitsuhiro and Official Notice as evidenced by Yoshida, Fujimura, or Hohl to reject these claims (Ans. 3-7).

internal memory” (*id.* at 6). Further, Appellants argue that the use of special function registers is contrary to the teachings of Mitsuhiro (*id.* at 5). More specifically, Appellants contend Mitsuhiro does not “disclose or suggest using special function registers in place of the general registers” (*id.* at 6). Appellants also argue Yoshida does not cure this deficiency (*id.*).

The Examiner finds Mitsuhiro discloses that (1) “a processor initiated store and restore of particular data to a memory location can reasonably [be] considered a special function” and (2) “it is special because these operations are initiated by an interrupt sequence and not subject to ‘general’ control by the program” (Ans. 8). The Examiner also finds the “Appellant[s] misconstrue[] Mitsuhiro’s register banks as being undistinguished from the general memory that contains them” (*id.*).

Have Appellants shown the Examiner erred in finding the prior art teaches or suggests a plurality of register bank blocks used as special function registers by the processor during the execution of the logical or arithmetic operations?

FINDING OF FACT (FF)

We find the following fact is shown by a preponderance of the evidence:

Mitsuhiro Reference

As depicted in Figure 1, Mitsuhiro discloses a computer having a data memory 36 that includes a plurality of general registers blocks, collectively designated as “register banks” (col. 4, ll. 15-19).

PRINCIPLES OF LAW

Claim Construction

Claims must particularly point out the subject matter which the applicant regards as his invention. 35 U.S.C. § 112, second paragraph. “[T]he PTO gives claims their ‘broadest reasonable interpretation.’” *In re Bigio*, 381 F.3d 1320, 1324 (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). During patent examination, claims are given their broadest reasonable interpretation in light of the specification as it would be interpreted by skilled artisans. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (citations omitted).

Obviousness

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

If the Examiner’s burden is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

ANALYSIS

Representative claim 1 recites, in relevant part, “a plurality of register bank blocks used as special function registers by the processor during the execution of the logical or arithmetic operations” (App. Br. 12, Claims

App'x). As set forth in the Findings of Fact, Mitsuhira discloses a plurality of register bank blocks (i.e., register banks) that are used by a computer in which they are contained (FF). We find Mitsuhira's register banks teach the claimed register bank blocks, since they can be used by the processor to perform various storage functions including logical or arithmetic operations. Furthermore, we note that the registers of Mitsuhira are internal to the computer.

Alternatively, we note that Appellants' argument that the special function registers are internal to a processor is not commensurate with the scope of the claim. While the claim does recite that the registers are used as special functions registers, we find no evidence on the record before us that these registers are "internal" to the processor. Nonetheless, we find the recitation of "the plurality of register bank blocks used as special function registers" to be a statement of intended use. A statement of intended use in an apparatus claim cannot be used to distinguish the claim over the prior art apparatus. *See In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). Further, a claimed apparatus must be described by its structure, and not its intended use. The mere recitation of an intended use in a claim will not be given any patentable weight. *In re Dense*, 156 F.2d 76 (CCPA 1946). *See also In re Satchell*, Appeal 2008-0071, 2008 WL 4828136, (BPAI Nov. 6, 2008). Accordingly, we find claim 1 does not require that the plurality of register bank blocks be used as "special function registers by the processor during the execution of the logical or arithmetic operations."

It therefore follows that Appellants have failed to persuade us of error in the Examiner's conclusion of obviousness with regards to representative claim 1.

35 U.S.C. § 103(a): claims 8-10, 17, and 18

Appellants argue the rejection of claims 8-10, 17, and 18 on the same basis as set forth for representative claim 1, discussed above (App. Br. 9). Further, Appellants argue Fujimura does not cure the deficiencies of Mitsuhiro and Yoshida (*id.*). Additionally, Appellants contend the Examiner did not analyze how the combination of references would correspond to the features recited in claim 8 (*id.*). We do not agree.

We find that the Examiner made findings on page 6 of the Answer, which include a specific reference to column 2 of Fujimura. However, based on our review of Appellants' arguments, we find Appellants have not addressed the Examiner's findings on page 6 of the Answer. Thus, we find Appellants' arguments fail to explain why the Examiner erred in his findings. Accordingly, for the reasons discussed (1) in this section, and (2) with respect to claim 1, *supra.*, we find Appellants have failed to persuade us of error in the Examiner's conclusion of obviousness with respect to claims 8-10, 17, and 18.

35 U.S.C. § 103(a): claim 12

Appellants assert their invention is not obvious over the prior art on the same basis as set forth for representative claim 1 discussed above (App. Br. 10). Further, Appellants argue Hohl does not cure the deficiencies of Mitsuhiro and Yoshida (*id.*). Specifically, Appellants contend Hohl fails to teach the limitations of claim 12. We do not agree.

We find that the Examiner made findings on page 7 of the Answer, which include a specific reference to (1) column 4 of Mitsuhiro and (2)

column 34 of Hohl. However, based on our review of Appellants' arguments, we find Appellants have not addressed the Examiner's findings on page 7 of the Answer. Thus, we find Appellants' arguments fail to explain why the Examiner erred in his findings. Accordingly, for the reasons discussed here, and with respect to claim 1, *supra.*, we find Appellants have failed to persuade us of error in the Examiner's conclusion of obviousness with respect to claim 12.

CONCLUSION

Appellants have not shown the Examiner erred in rejecting claims 1 through 21 under 35 U.S.C. § 103(a).

DECISION

We affirm the Examiner's rejection of claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Mitsuhiro and Official Notice.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2009).

AFFIRMED

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